



January 30, 2015

Mr. Jordan Garrard
On-Scene Coordinator (OSC)
U.S. Environmental Protection Agency (EPA), Region 4
61 Forsyth Street, SW, 11th Floor
Atlanta, Georgia 30303

Subject: Emergency Response Letter Report
Skull Creek Spill
Hilton Head Island, Beaufort County, South Carolina
Contract Number: EP-54-14-03
TDD Number: 0001/TT-01-015

Dear Mr. Garrard:

The Tetra Tech, Inc. (Tetra Tech) Superfund Technical Assessment and Response Team (START) is submitting this letter report to summarize the emergency response activities conducted on January 23, 2015, at the Skull Creek Spill in Hilton Head Island, Beaufort County, South Carolina. This report includes two enclosures. Enclosure 1 contains the Clean Water Act Section 311(b)(3) case documentation package. Enclosure 2 contains copies of the two sample identification reports from the Smiths HazMat ID instrument for a sample of the material found floating on the surface of the water near the point of discharge.

BACKGROUND

On January 23, 2015, EPA notified Tetra Tech START of an ongoing spill of unknown origin located at the Skull Creek Marina in Hilton Head Island, Beaufort County, South Carolina. According to officials from the South Carolina Department of Health and Environmental Conservation (SC DHEC), the spill began several days prior on approximately January 10, 2015, and was being assessed by representatives from the marina, as well as SC DHEC and the U.S. Coast Guard (USCG). The source of the discharge was not initially known, but resulted in a white, string-like substance observed floating on the surface of Skull Creek in the vicinity of the marina. Preliminary observations by USCG officials did not identify the presence of petroleum substances and requested assistance from EPA based on the suspected presence of hazardous materials.

FIELD ACTIVITIES AND OBSERVATIONS

On January 23, 2015, EPA OSC Jordan Garrard requested the mobilization of Tetra Tech START to the site to assist with the assessment and documentation of the release. Upon arrival, EPA coordinated with representatives from Skull Creek Marina, SC DHEC, and USCG. Based on further assessment at that time, personnel identified a slow, ongoing leak from one of the fuel supply lines that feeds the marina's fuel dock located near the northern end of the marina. Visual observation indicated that the fuel was reacting with the Styrofoam (extruded polystyrene foam) float associated with the dock, which resulted in the release of the white, string-like substance found floating on the water's surface. EPA conducted testing of the string-like material using a Smiths Detection HazMatID unit, which indicated the presence of compounds (i.e. styrene and polystyrene) consistent with this evaluation (see Enclosure 2).

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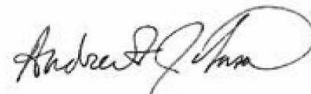
Once the fuel leak was identified, marina representatives shut down the fuel supply line and began deploying absorbent boom and pads to clean up the spill. Based on discussions between marina representatives, USCG, and EPA, the marina will continue investigating and identify additional repairs to be made, including an underwater assessment of the Styrofoam float and fuel dock. USCG personnel will provide future oversight and documentation of the incident. EPA and Tetra Tech START demobilized from the site on January 23, 2015.

If you have any questions or need additional copies of this report, please contact me, Brian Croft, at (678) 775-3113.

Sincerely,



Brian Croft
START IV Project Manager



Andrew F. Johnson
START IV Program Manager

Enclosures (2)

cc: Katrina Jones, EPA Project Officer
Angel Reed, START IV Document Control Coordinator

ENCLOSURE 1

**CLEAN WATER ACT SECTION 311(b)(3)
CASE DOCUMENTATION PACKAGE**

(Six Pages)

**CLEAN WATER ACT SECTION 311(b)(3)
CASE DOCUMENTATION PACKAGE**

INCIDENT SUMMARY REPORT

The incident summary report should describe the events that took place before, during, and after the spill. It should also include the names of any witnesses of the spill and cleanup, and where they can be reached.

The following questions will help you to document the discharge and write an accurate report.

1. Provide the time and date of oil or hazardous substance discharge, and the time and date of discovery that the discharge was reaching or threatening a waterway.

According to representatives of Skull Creek Marina, the discharge was initially discovered on approximately January 10, 2015, but the source and nature of the discharge were unknown at the time. On January 23, 2015, EPA Region 4 OSC Jordan Garrard responded to the incident to provide assistance. During assessment activities conducted at that time, it was determined that a slow, ongoing release of fuel from the marina's fuel dock supply line was entering Skull Creek and apparently dissolving the Styrofoam floats associated with the fuel dock, which resulted in the presence of a white, string-like material on the surface of the water.

2. The time and date of the response to the discharge by EPA, START, and the PRP if applicable. Provide the name(s) of any contractor(s) employed.

On the evening of Friday, January 23, 2015, EPA and START responded to the incident. Representatives from Skull Creek Marina, South Carolina Department of Health and Environmental Conservation (SC DHEC), and the U.S. Coast Guard (USCG – Charleston) were already onsite.

3. The type of discharge (oil or hazardous substances), the type of oil or the chemical name and formula, the total amount of discharge in gallons, barrels, pounds, or kilograms; and the total number of days of discharge. If the solution discharged was a mixture, please give the percentages of substances in the mixture or solution.

Based on assessment activities conducted on January 23, 2015, gasoline was observed entering Skull Creek from the marina's fuel supply line. The total amount of discharge is unknown, but reportedly occurred from approximately January 10, 2015 through January 23, 2015.

4. The location of the discharge including street address, city, county, and state.

The discharge occurred from a fuel supply line feeding the Skull Creek Marina's fuel dock. The Skull Creek Marina is located along the Intracoastal Waterway at 1 Waterway Lane, Hilton Head Island, Beaufort County, South Carolina 29926. Approximate geographic coordinates for the point of discharge on the fuel dock are 32.246252 degrees north, 80.747705 degrees west.

5. The description of the facility or vessel from which the material was discharged (i.e. pipeline, tank, well, ship, container, etc.).

The discharge was identified leaking from a fuel line feeding the Skull Creek Marina's fuel dock. Skull Creek Marina is a boater's marina capable of accommodating boats up to 200 feet in length.

6. The total storage capacity (gallons, barrels, pounds, kilograms, etc.) of the facility or vessel responsible for the discharge.

Total storage capacity for Skull Creek Marina is unknown

7. Did the oil or hazardous substances discharge into water? Yes (Skull Creek)
 - a. Please indicate the location, in relation to the facility or vessel responsible for the discharge, of the first water reached.

Skull Creek, adjacent to the marina's fuel dock. Approximate geographic coordinates for the point of discharge on the fuel dock are 32.246252 degrees north, 80.747705 degrees west.

- b. If not already in water, what is the distance between the source of discharge and the nearest water body?

Not applicable

- c. Give the quantity of oil or hazardous substances reaching the water.

Quantity of material discharged is unknown.

- d. Give the quantity of oil or hazardous substances that did not reach the water.

Quantity of material did not reach the water is unknown.

- e. Describe the type of waterway affected (i.e. mudflat, sandflat, wetland, ditch, creek, bayou, tributary, stream, river, lake, etc.). Give the name of the waterway and bodies of water to which it connects.

Material was discharged to Skull Creek, a tidal body of water that is part of the Intracoastal Waterway, which connects directly to Beaufort Sound and the Atlantic Ocean.

- f. Provide a physical description of the receiving waters, including depth, width, and flow rate.

Skull Creek is part of the Intracoastal Waterway, and flows along the western side of Hilton Head Island, and along the eastern side of Pinckney Island National Wildlife Refuge. According to marina officials, tidal fluctuations in the area are approximately 8 feet.

- g. Indicate if any of the water bodies or connecting water bodies, as described above, are used for commerce, recreation, agriculture, etc.

Skull Creek is part of the Intracoastal Waterway, and is used for recreational purposes, including boating and fishing.

- h. List any sensitive environments (i.e. wetlands), endangered species, water wells, and or drinking water intakes impacted or potentially impacted by the discharge.

Pinckney Island National Wildlife Refuge is located on the far side of Skull Creek from the marina.

8. Document how this spill violated the Clean Water Act.

Petroleum product (gasoline) was released from the facility directly to Skull Creek, a navigable waterway of the United States.

9. Describe in detail what actually caused the discharge.

A leak from a fuel line that feeds the Skull Creek Marina's fuel dock was identified as the source of the discharge.

10. Describe the damage to public health and the environment as a result of the spill. How many feet, miles, etc., of land and water were affected by the discharge? Was there observed damage to the terrestrial and aquatic biota and vegetation? Were any drinking water intakes forced to close? Were any persons required to evacuate? If yes, describe the damage.

The discharge apparently caused the Styrofoam floats associated with the fuel dock to be partially dissolved, which resulted in the release of a white, string-like material into Skull Creek.

11. Describe the procedures taken to clean up the discharge and to mitigate the environmental damage and public health threats. Include dates and times for the individual procedures.

Once identified as the source, the fuel supply lines were turned off and personnel used absorbent booms and pads to clean up discharged materials to the maximum extent practicable. In addition, marina personnel were instructed to remove the white, string-like material from the water wherever feasible for trash disposal.

12. List the federal and state agencies contacted by the owner or operator at the time of the discharge. Also include the agency's location (mailing address, city, county, state), the date and time of notification, and the name of the official contacted.

South Carolina Department of Health and Environmental Conservation
U.S. Coast Guard (Charleston, SC)
U.S. EPA Region 4 (Atlanta, GA)

13. State whether an SPCC inspection was conducted and describe any findings.

Although a formal SPCC inspection was not conducted, the fuel lines supplying the marina's fuel dock were observed to be leaking.

14. Document the spill history of the facility and list the discharges which have occurred at this facility within the past five years using the following table.

<u>DATE</u>	<u>AMOUNT DISCHARGED</u>	<u>AMOUNT IN WATER</u>	<u>SOURCE & CAUSE</u>
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Not available at the time of the incident.

15. Provide the name, title, home address, and home work telephone number(s) of the owner(s) of the vessel or facility responsible for the discharge.

Skull Creek Marina
1 Waterway Lane
Hilton Head Island, South Carolina 29926
Work: (843) 681-8436

16. Provide the name, title, home address, and home work telephone number(s) of the operator(s) of the vessel or facility responsible for the discharge if different from the owner, and the relationship between the owner and operator (i.e. employee, contractor, subcontractor, lessee, etc.).

Same as above

17. Provide the names, titles, home addresses, and home work telephone numbers of the persons who have knowledge of the facts concerning the spill as an attachment to the report labelled "**Table of Witnesses**". Include EPA, State, and local officials; START Strike Team members, other Federal agencies, the company, and the cleanup contractor in the table.

Skull Creek Marina
1 Waterway Lane
Hilton Head Island, South Carolina 29926
(843) 681-8436

Dave Payne
SC DHEC

Jordan Garrard
U.S. EPA Region 4
(678) 644-8648

Brian Croft
Tetra Tech START
(206) 300-0301

18. Does the owner or operator have a National Pollutant Discharge Elimination System (NPDES)

permit or any other discharge permit provided by the local, state, or federal government. If yes, name and describe the permit.

Unknown

19. Has the facility ever been assessed a fine for this incident or any other discharge by any other government entity (i.e. city, county, state, federal)? If yes, name the agency or agencies that have assessed a fine(s) on the facility or vessel, and the date(s) when the fine(s) was assessed.

Unknown

20. Include the Federal Project Number on the title (cover) sheet of the incident summary report.

CASE DOCUMENTATION COVER SHEET

FEDERAL PROJECT NUMBER _____

OSC NAME / PHONE # Jordan Garrard / (678) 644-8648

DATE OF SPILL January 23, 2015

LOCATION Skull Creek Marina, 1 Waterway Lane, Hilton Head Island, South Carolina 29926

RESPONSIBLE PARTY / ADDRESS / PHONE # Skull Creek Marina, 1 Waterway Lane, Hilton Head Island, South Carolina 29926
(843) 681-8436

SUBSTANCE SPILLED Gasoline

AMOUNT SPILLED Unknown

BODY OF WATER AFFECTED Skull Creek (part of Intracoastal Waterway)

A complete documentation package will consist of the following, where applicable.

- ___ 1. Case Documentation Cover Sheet.
- ___ 2. Incident Report Form for the spill.
- ___ 3. Completed oil response checklist with applicable attachments.
- ___ 4. Any Notices of Federal Interest or Assumption, or any CWA Section 311(c) or (e) Orders.
- ___ 5. OSC logbook.
- ___ 6. Photographs.
- ___ 7. Analytical data.
- ___ 8. Incident summary report.
- ___ 9. A completed CWA § 308 questionnaire from the responsible party.
- ___ 10. A copy of the SPCC Plan.
- ___ 11. A copy of the Facility Response Plan.
- ___ 12. Any Letters of Deficiency, Administrative Orders, or Administrative Complaints related to the spill.
- ___ 13. Copies of any Agency correspondence concerning the incident.
- ___ 14. Maps and drawing showing the source of the spill and the extent of damage.
- ___ 15. A penalty calculation matrix.
- ___ 16. Any reports by local, state, or other federal agency documenting damages caused by the spill.
- ___ 17. Reports by EPA, local, or state, or other federal agency documenting prior deficiencies or violations by the facility.
- ___ 18. ERNS search of facility spill history.
- ___ 19. Table of Witnesses.

ENCLOSURE 2

**SMITH DETECTION HAZMAT ID
SAMPLE IDENTIFICATION REPORTS**

(Six Pages)



Sample ID Report

Spectral ResultFile:C:\SmithsDetection\QualID\HazMatID\Data\SKULL CREEK\1 01-23-2015 at 21h34m36s.SIR

User Name :Admin

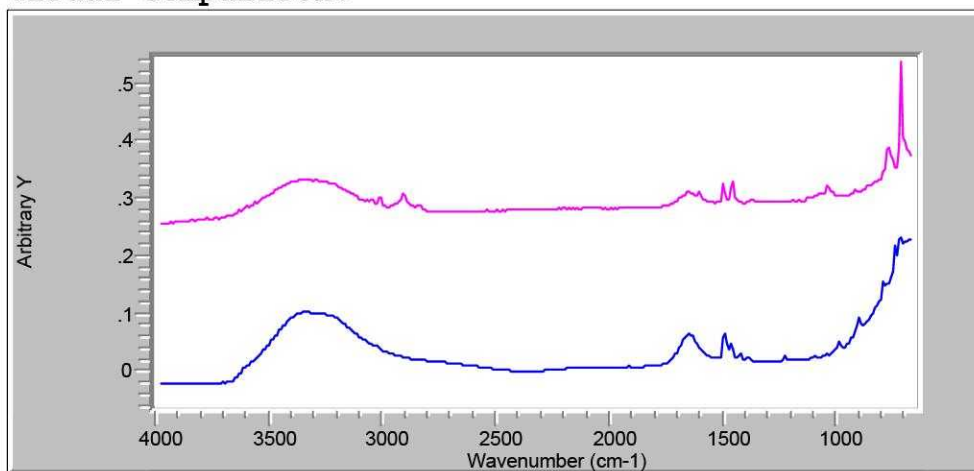
Date :Created on 01-26-2015 10:54:35

Incident Name :SKULL CREEK

Sample ID :1 01-23-2015 at 21h34m36s.SPC

Comments :

Visual Comparison:



Sample ID

Library Hit

Library Search Result Table

Hit#	Quality	Text Identification
1	0.8722078	BENZYLTRIMETHYLAMMONIUM HYDROXIDE, 40 wt. % solution in water
2	0.8454735	INT-RO; TND-8
3	0.8417385	AMBERLYST-RO; A-21
4	0.8402048	STOMF 400 SC, BASF, herbicide
5	0.8320647	EC NEUTRAFON 5088, HENKEL, Other, Industrial Cleaner; manuf. in Austria
6	0.8216826	HIKADO SC 200, Syngenta, herbicide
7	0.820487	OMITE 570 EW, Chemtura, insecticide
8	0.8276051	ROXEL FLO, BASF, fungicide
9	0.827012	ACRYLIC COPOLYMER WITH STYRENE, Copolymer
10	0.8259766	ISOSINTH VX 110 EF, DA STUART, Special oil, manuf. in Germany

Method Information

Method Name :C: SmithsDetection QualID HashMatID Methods Aldrich.admin
Resolution(cm-1) :4
Background Scans :22
Sample Scans :22
Minimum Quality :.80
Libraries Searched:C: SMITHSDTECTION QUALID HASHMATID LIBRARY 4TH QMD CST.LIB
C: SMITHSDTECTION QUALID HASHMATID LIBRARY ATRAIL04.LIB
C: SMITHSDTECTION QUALID HASHMATID LIBRARY ATRAIL04.LIB
C: SMITHSDTECTION QUALID HASHMATID LIBRARY DELAWAREPESTICIDES.LIB

C: SMITHSDTECTION QUALID HASHMATID LIBRARY EXPLOSIVESANDEROPELLANTSLIBRARY.LIB
C: SMITHSDTECTION QUALID HASHMATID LIBRARY EXPLUM04.LIB
C: SMITHSDTECTION QUALID HASHMATID LIBRARY SENSIR_TX.LIB
C: SMITHSDTECTION QUALID HASHMATID LIBRARY SENSIR00.LIB

C: SMITHSDTECTION QUALID HASHMATID LIBRARY SENSIR04.LIB C: SMITHSDTECTION QUALID HASHMATID LIBRARY SENSIR00.LIB

C: SMITHSDTECTION QUALID HASHMATID LIBRARY SENSIRWFEURS.LIB C: SMITHSDTECTION QUALID HASHMATID LIBRARY SMITHSCWA_IP.LIB C: SMITHSDTECTION QUALID HASHMATID LIBRARY SMITHSIREXEXPLOSIVES_HID.LIB C: SMITHSDTECTION QUALID HASHMATID LIBRARY TRAVELIREXPLOSIVES.LIB C: SMITHSDTECTION QUALID HASHMATID LIBRARY USERLIBRARY.LIB



Sample ID Report

Spectral ResultFile:C:\SmithsDetection\QualID\HazMatID\Data\SKULL CREEK\1A
01-23-2015 at 21h43m2s.SIR

User Name :Admin

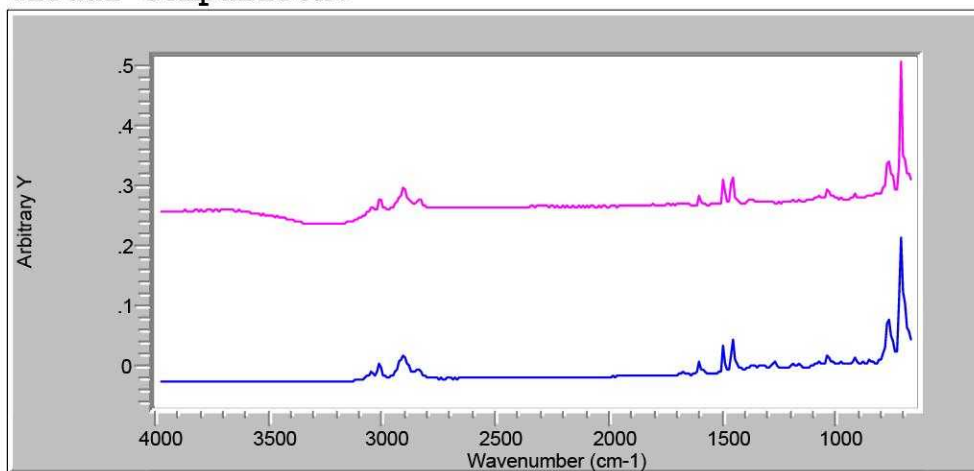
Date :Created on 01-26-2015 10:57:06

Incident Name :SKULL CREEK

Sample ID :1A 01-23-2015 at 21h43m2s.SPC

Comments :

Visual Comparison:



Library Search Result Table

Hit#	Quality	Text Identification
1	0.8608215	CHLOROMETHYLATED POLYMER BEADS S-X1
2	0.8604351	Chloromethylated Polymer beads S-X1
3	0.8546716	Styrene
4	0.8542966	POLYSTYRENE, average Mw 200,000-4,000
5	0.8293491	DIETHYLAMINE, POLYMER-BOUND, Particle size 100-200 mesh
6	0.8252097	POLYSTYRENE, average Mw 10,000 (Typical) powder
7	0.8245345	HERRIFIELD'S RESIN, 1 % cross-linked Particle size 200-400 mesh
8	0.8214715	POLY(P-METHYLSTYRENE), average Mw 790 by WEO beads
9	0.8149319	JANDEJEL-TH-CL, Particle size 100-200 mesh
10	0.810151	POLYSTYRENE, average Mw 35,000 (Typical) powder

Method Information

Method Name :C: SmithsDetection QualID HashMatID Methods Aldrich.admin
Resolution(cm-1) :4
Background Scans :22
Sample Scans :22
Minimum Quality :.80
Libraries Searched:C: SMITHSDTECTION QUALID HASHMATID LIBRARY 4TH QMD CST.LIB
C: SMITHSDTECTION QUALID HASHMATID LIBRARY ATRAIL04.LIB
C: SMITHSDTECTION QUALID HASHMATID LIBRARY ATRAIL04.LIB
C: SMITHSDTECTION QUALID HASHMATID LIBRARY DELAWAREPESTICIDES.LIB

C: SMITHSDTECTION QUALID HASHMATID LIBRARY EXPLOSIVESANDEROPELLANTSLIBRARY.LIB
C: SMITHSDTECTION QUALID HASHMATID LIBRARY EXPLUM04.LIB
C: SMITHSDTECTION QUALID HASHMATID LIBRARY SENSIR_TX.LIB
C: SMITHSDTECTION QUALID HASHMATID LIBRARY SENSIR00.LIB

C: SMITHSDTECTION QUALID HASHMATID LIBRARY SENSIR04.LIB C: SMITHSDTECTION QUALID HASHMATID LIBRARY SENSIR00.LIB

C: SMITHSDTECTION QUALID HASHMATID LIBRARY SENSIRWFEURS.LIB C: SMITHSDTECTION QUALID HASHMATID LIBRARY SMITHSCWA_IP.LIB C: SMITHSDTECTION QUALID HASHMATID LIBRARY SMITHSIREXEXPLOSIVES_HID.LIB C: SMITHSDTECTION QUALID HASHMATID LIBRARY TRAVELIREXPLOSIVES.LIB C: SMITHSDTECTION QUALID HASHMATID LIBRARY USERLIBRARY.LIB